UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,124	02/27/2004	Robert Beverley Basham	SJO920030103US1	8774

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KONRAD RAYNES & VICTOR, LLP.
ATTN: IBM37
315 SOUTH BEVERLY DRIVE, SUITE 210
BEVERLY HILLS, CA 90212

EXAMINER
HUSSAIN, TAUQIR

ART UNIT	PAPER NUMBER
2452	

NOTIFICATION DATE	DELIVERY MODE
02/19/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

krvuspto@ipmatters.com

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 January 2009*.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,8,10,11,16-18 and 37-53* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1, 8, 10-11, 16-18 and 37-53* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
        1.☐ Certified copies of the priority documents have been received.
        2.☐ Certified copies of the priority documents have been received in Application No. _____.
        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on

01/15/2009 has been entered.

Response to Amendment

2.   This office action is in response to amendment /reconsideration filed on

01/15/2009, the amendment/reconsideration has been considered. Claims 2-7, 9, 12-15

and 19-36 have been canceled. Claims 1 and17 has been amended. Claims 37-53 have

been newly added and therefore, claims 1, 8, 10-11, 16-18 and 37-53 are pending for

examination, the rejection cited as stated below.

Response to Arguments

3.   Applicant's arguments have been fully considered but are moot in view of the

new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 1, 8, 10-11, 16-18 and 37-53 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Connor et al (Pub. No.: US 2004/0024863 A1), hereinafter,

"Connor" in view of Sheehy, Jr. et al (Patent No.: US 7233957 B1), hereinafter,

"Sheehy" and in view of <u>A component of the Greenstone digital library software from the</u>

<u>New Zealand Digital Library Project at the University of Waikato, New Zealand,</u>

<u>hereinafter "CRC32.cpp" and further in view of Pfeiffer et al. (Pub. No.: US</u>

<u>2007/0198291 A1), hereinafter "Pfeiffer".</u>

6.   As to claims 1, 38 and 46 Connor discloses, defining a plurality of network data

aggregations (Connor, Fig.1, elements-10a-10c, [0020], where network data storage

10a-10c are disclosed),

        computing a current state value for at least one of the <u>network</u> data aggregations

(Connor, [0008], where recently added entry is a state value which can be to the added

entry in the network discovery);

        for at least one current state value, determining if the current state value is

different than a corresponding prior state value <u>for corresponding data aggregation</u>

(Connor, [0009], where final state pass state detection means state value between first

and final is obviously different since there has been an added entry before final state);

and

        data corresponding with at least one network data aggregation determined to

have a current state value that is different than a corresponding prior state value for the

different data aggregation (Connor, Fig.3, element-58-64, [0041], where data gatherer

merges the newly detected network component in the fabric which obviously changes

the state value of the overall system.

Connor however is silent on disclosing explicitly, merging above data

aggregation.

However, Sheehy discloses, merging above data aggregation (Sheehy, Fig.4-9,

Col.11, lines 36-44,where first state value change is calculated with respect to the prior

state value and Fig.5, Step-205-208 describes if current verification value is equal to the

former or prior verification value than in step-208 "add that former verification value to

the current management data set).

Therefore, it would have been obvious to one ordinary skilled in the art to

determine and reflect the affects of any overall changes in the SAN fabric in the

management database as taught by Sheehy in the system of Connor (which reflect the

zonal changes in the SAN environment) to overcome overall diagnostic troubleshoot

limitation is SAN fabric through analyzing management database of Sheehy (Sheehy,

Abstract).

Connor and Sheehy however are silent on disclosing explicitly, <u>wherein the</u>

<u>current state value is a CRC code, and wherein the CRC code is computed utilizing</u>

<u>data associated with the corresponding data aggregation and a CRC polynomial,</u>

CRC32.cpp discloses wherein the CRC polynomial is a 32 bit CRC polynomial

which has the following form:

(CRC32.ccp, Page.3, ifdef __USE_CRC32_TABLE_FUNCTIONS__int
MakeCRC32 (ostream & stream), where 32 bit CRC polynomial is used to calculate a
sophisticated checksum based on the algebra polynomials).

Therefore it would have been obvious to one of the ordinary skilled in the art at
the time the invention was made to combine the teachings of Connor and Sheehy as
applied to independent claim 1 above with the teachings of CRC32.ccp in order to
provide a method where the Cyclic Redundancy Check, is a way to detect bit errors that
occur during data storage or transmission.

Conner, Sheehy and CRC32.cpp however are silent on disclosing explicitly,
wherein the network data aggregations are based on switch boundaries, wherein inter-
switch links are used to define the plurality of network data aggregation, and wherein
the network data aggregations are defined via an XML file using a DTD format.

Pfeiffer however discloses a similar concept as, wherein the network data
aggregations are based on switch boundaries (Pfeiffer, Fig. 2 and 3, [0003], where
system boundaries are disclosed which of course will have switches in it), wherein inter-
switch links are used to define the plurality of network data aggregation, and wherein
the network data aggregations are defined via an XML file using a DTD format (Pfeiffer,
Fig. 4, [0092], XML data reporter means there is data collection is done via XML code
and reporting is done in DTD format).

Therefore it would have been obvious to one of the ordinary skilled in the art at
the time the invention was made to combine the teachings of Conner, Sheehy and
CRC32.cpp with the teachings of Pfeiffer in order to provide a preferred XML interface

provides this solution by making new use of two broadly established technologies:

[0011] The HTTP protocol used by Web browsers and other Web-enabled components.

[0012] XML, essentially a formalized version of the Web mark-up language HTML. XML allows generation of plain-text documents that are verifiably complete and syntactically correct and therefore `valid` and which can be used to identify exactly the various elements of information that are contained in the document.

7.   As to claims 8, 39 and 47 Connor, Sheehy, CRC32.ccp and Pfeiffer, discloses the invention substantially as in parent claims 1 above, including, wherein the operation of computing a current state value to at least one of the data aggregations is performed by at least one agent discovery service (Connor, [0012], where discovery tool has a task service which performs operations e.g. detecting newly added component and generating entries for each new event).

8.   As to claims 10-11, 40-41 and 48-49 Connor, Sheehy, CRC32.ccp and Pfeiffer, discloses the invention substantially as in parent claim 1, including, wherein the operation of computing a current state value for at least one of the data aggregations comprises processing data in the at least one of the data aggregations in a prescribed order (Connor, [0042], where first in first out is a prescribed order).

9.   As to claims 16, 42 and 50 are rejected for same rationale as applied to claim 1 above.

10.   As to claims 17, 43 and 51, Connor, Sheehy, CRC32.ccp and Pfeiffer, discloses

the invention substantially as in parent claim 16, including, wherein the plurality of data

aggregations includes at least one data aggregation that is a subset of a corresponding

superset data aggregation (Connor, fig.1, element-8a and 8b are subset with in the

Fabric where Fabric is a superset, and wherein the subset data aggregation is located

in the hierarchal ordering after the corresponding superset data aggregation (Connor,

Fig.1, [0020], where Storage 10a, 10b and 10c are in hierarchical order corresponding

to Host 6a, 6b and 6c with in the Fabric which is a superset).

11.   As to claim 18, 44 and 52, Connor, Sheehy, CRC32.ccp and Pfeiffer, discloses

the invention substantially as in parent claim 1, including, wherein the operations further

comprise requesting polling on data aggregations that are subsets of a superset data

aggregation that has a changed state value (Connor, [0011], Fig.2, where blackboard

component calls the program which polls and run operations to discover changes in

SAN system and reports the aggregated data to SAN management system).

12.   As to claims 37, 45 and 53, Connor, Sheehy, CRC32.ccp and Pfeiffer, discloses,

the invention substantially including, wherein the switch boundaries are defined at links

that are chosen to minimize a number of links at the switch boundaries (Pfeiffer, Fig.3,

[0053], where customizing can be interpret as selecting switch with minimal link).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAUQIR HUSSAIN whose telephone number is (571)270-1247. The examiner can normally be reached on 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571 272 3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. H./
Examiner, Art Unit 2452

/Kenny S Lin/
Primary Examiner, Art Unit 2452